

Abstract of the Disclosure

A motion estimation procedure for bitrate scalability and spatial scalability, wherein an original video frame is divided into a plurality of rectangular blocks of coefficients and a plurality of reference blocks are formed from an offset of the rectangular blocks in both x and y directions. For a given original video frame, one or more reference frames are selected so that a plurality of differences between the reference blocks and the rectangular blocks can be computed partly based on the summation of the differences between individual coefficients in each block. A weighted sum of the differences is computed and minimized so as to optimize the offset.

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